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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/092,090

Applicant(s)

FURUYAMA, HIROAKI

Examiner

JAMIE JO VENT ATALA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed November 14, 2008 have been fully considered but they are not persuasive. On pages 7-10 applicant argues the prior art of record does not disclose the following limitations "wherein said control means changes the predetermined recording period for recording still image data between a first predetermined period for recording the still image data and a second predetermined period shorter than the first predetermined period for recording still image data in accordance with the recording mode set by said recording mode setting means so that said recording means starts recording on the recording medium the still image data in response to the recording instruction of the still image by said instruction means and stops recording the still image data at the first predetermined period after the recording was started when the first recording mode is set by said recording mode setting means, and starts recording on the recording medium the still image data in response to the recording instruction of the still image by said instruction means and stops recording the still image data at the second predetermined period after the recording was started when the second recording mode is set." Fisher et al (US 7,133,068) teaches the generation of still frames at a specific time interval dependent on scan speed/recording mode of the scanning system and the length of still frames (Column 6 Lines 64+ through Column 7 Lines 1-11). The still frames are generated at a specific time interval that is dependent on scanning speed (Column 7 Lines 48-67). As the scanning speed changes so does the time interval/recording period to record the still frames (Column 8

Lines 1-38). The shorter time interval/second predetermined period produces still frames based on the recording/scanning mode that is set by the system. Thus, Fisher et al teaches the still image data stops recording after the predetermined time interval and thereby produces a composite still image from overlapping still images by using varying scanning/recording modes and time interval/recording periods to produce an improved photographic detailed image.

Furthermore, applicant argues on pages 11-15 that the prior art of record fails to disclose "...to record detection data for detecting still image data..." and Claims 3-4 recite "multiplexing the detection data". In regard to Claim 2, discloses "control means controls said recording means to record detection data for detecting still image data recorded on the recording medium". Hori (US 5,991,504) teaches the detection of still image mode as seen in Figure 3. The image/detection data determines the mode of the system and further determines if a moving image or still image is to be recorded. As seen in Figure 1, when a still image mode is set by the switch the information is read from the memory (Column 5 Lines 10-23) and thereby acts as detection means for detecting still images on the recording medium prior to transporting the data onto the tape. Thereby, allowing for the proper images to be recorded based on data being read from the memory and processed by the system. In regard to Claim 3, discloses "...control means controls said recording means to record the detection data by multiplexing the detection data on the image data..". Hori teaches the multiplexing the still image and the related image /detection data (Column 5 Lines 28-40) to allow for proper writing of the data from memory. Thereby, the image/detection data is provided

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with the still image data for further recording or processing. Further arguments are regarding new claim amendments and are further rejected below regarding information being recorded from an "imaging means". Although, all of applicants points are understood the examiner can not agree and the rejection is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imai et al (US 6,771,882) in view of Hori (US 5,991,504) in further view of Fisher et al (US 7,133,068).

[claim 1]

In regard to Claim 1, Imai discloses a recording apparatus comprising:

- Recording mode setting for setting a first recording mode for recording moving and still image data each having a first information quantity per unit time on a recording medium (Column 1 Lines 33-60 describes the recording of digital video data wherein the moving image data is recorded onto the recording medium in various modes as further stated in Column 10 Lines 13-51. Furthermore, it is

noted that still reproduction can be achieved at this time by having a frame repeated continuously for purposes of recording a still frame. The digital data being recorded is processed through the SDL recording mode as described in Column 2 Lines 19-67);

- A second recording mode for recording moving and still image data each having a second information quantity larger than the first information quantity per unit time on the recording medium (The digital data is recorded using a second mode of SD as described in Column 6 Lines 1-22. The SD recording mode allows for larger quantity per unit time as the digital data of a frame is recorded on ten tracks compared to SDL two frames are recorded on ten tracks as described in Column 1 Lines 33-58. Thereby the SD mode provides a larger quantity per unit time on the recording medium);
- Instruction means for instructing recording of a still image (Column 10 Lines 35-67 discusses still reproduction of one frame and thereby allowing the recording of the one frame into a still image appearance); however, fails to disclose
 - Imaging means for imaging an object and outputting moving image data
 - Memory for storing image data of one frame of moving image data output from the image means

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- Compressing means for compressing information quantity of moving image data output from said image means and information quantity of the image data of one frame stored in memory
- Recording means for recording the moving image data output from compressing means and repeatedly recording the image data of one frame output from said compression means as still image data
- Control means for controlling said recording means to start recording on the recording medium still image data in response to a recording instruction of the still image by said instruction means and to stop recording the still image data a predetermined recording period after the recording was started
- Wherein said control means changes the predetermined recording period for recording the still image data between a first predetermined when the first recording mode setting means, and changes the predetermined recording period to a second predetermined period shorter than the first predetermined period when the second recording mode is set.

Hori teaches a system of for compressing and recording still images comprising:

- Imaging means for imaging an object and outputting moving image data (Figure 1 input allows for information from a video camera (Column 3 Lines 28-48);

- Memory for storing image data of one frame of moving image data output from the image means (Figure 1 shows the input and storage of moving image data);
- Compressing means for compressing information quantity of moving image data output from said image means and information quantity of the image data of one frame stored in memory (Column 3 Lines 28+ through Column 4 Lines 1-43 describes the storing and compressing of data);
- Recording means for recording the moving image data output from compressing means and repeatedly recording the image data of one frame output from said compression means as still image data (Figure 1 shows the recording and describes the output in Column 3 Lines 28+ through Column 4 Lines 1-43).
- Control means for controlling said recording means to start recording on the recording medium still image data in response to a recording instruction of the still image by said instruction means and to stop recording the still image data a predetermined recording period after the recording was started (Figure 3 shows the recording instruction of a still image data as described in Column 4 Lines 64+ through Column 5 Lines 1-65. Furthermore, a predetermined recording period is based on the recording of the still picture image as described in Column 5 Lines 10-23)

It is taught by Hori to provide a control means for recording still image data based on a predetermined time to provide effective memory management between still and moving video in various modes as described in Column 6 Lines 30-59. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use the recording mode system of still and moving images, as disclosed by Imai, and further teach the system to incorporate control of recording the still images based on a predetermined time, as taught by Hori, in order to allow for proper and efficient memory management of video images.

Fisher et al teaches a system wherein still images are processed and utilized from moving images further comprising:

- o Wherein said control means changes the predetermined recording period for recording the still image data between a first predetermined when the first recording mode setting means, and changes the predetermined recording period to a second predetermined period shorter than the first predetermined period when the second recording mode is set (Column 6 Lines 64+ through Column 7 Lines 1-11 describes the recording of still frames based upon the extraction of still frame from video data at a correct time interval. Furthermore, it is stated and shown in Figure 7 a second predetermined time interval for recording still frames wherein the still frames provide an overlapping region between each frame as the predetermined time period is shorter and thus provides overlapping of still

frames as described in Column 7 Lines 12-67 through Column 8 Lines 47).

It is thereby taught by Fisher et al to provide various time intervals for recording still pictures. The various time intervals containing a second shorter time interval for producing adjacent still frames to allow for greater overlap regions thus generate improved photographic detail (Column 8 Lines 39-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use recording mode system of still and moving pictures with control recordings of still pictures at predetermined time periods, as disclosed by Imai in view of Hori, and further teach the system to provide various predetermined time periods for the still images to provide proper recording of the still images, as taught by Fisher et al, in order to provide for improved video images.

[claim 2]

Regarding Claim 2, Imai discloses a recording apparatus; however, fails to disclose

- wherein the control means controls said recording means to record detection data for detecting the still image data recorded on the recording medium with the still image data in response to the recording instruction of the still image at a predetermined time defined to each of the first and second recording modes.

Hori additionally teaches an apparatus for controlling compression modes comprising:

- wherein the control means controls said recording means to record detection data for detecting the still image data recorded on the recording

medium with the still image data in response to the recording instruction of the still image at a predetermined time defined to each of the first and second recording modes (Column 5 lines 47+ through Column 6 Lines 1-22 describes the detecting of still images recorded on the recording medium and is determined based on predetermined time as described in Column 5 Lines 10-22).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to use the recording mode system of still and moving images, as disclosed by Imai, and further teach the system to detect still images, as taught by Hori, providing the motivation as previously discussed in Claim 1.

[claim 3]

Regarding Claim 3, Imai discloses an apparatus wherein the first recording mode is set by said recording mode setting means and substantially positioned in the middle of the first recording (Column 1 Lines 33-57 describes the SD and SDL modes that are set based on the recording mode. Furthermore, the information being placed in the middle of the first recording is further discussed in Column 2 Lines 6-56); however, fails to disclose

- o control means controls said recording means to record the detection data by multiplexing the detection data on the image data for a period shorter than, the substantially positioned in the middle of the first recording

Hori teaches a system wherein information is multiplexed onto the data including compression and recording mode information (Column 3 Lines 35-46) and further comprising:

- control means controls said recording means to record the detection data by multiplexing the detection data on the image data for a period shorter than, (Column 5 lines 47+ through Column 6 Lines 1-22 describes the detecting of still images recorded on the recording medium based on predetermined timing. Furthermore, as seen in Figure 2 the recording of image data is shown based on the compression modes).

It is taught by Hori to provide a control means for recording information that is detected to provide an effective detection between still and moving video in various modes as described in Column 6 Lines 30-59. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use the recording mode system of still and moving images, as disclosed by Imai, and further teach the system to incorporate control means for controlling the recording of detection data, as taught by Hori, in order to allow for proper and efficient detection of video images.

[claim 4]

Regarding Claim 4, Imai discloses an apparatus wherein the second recording mode is set by said recording mode setting means (Column 1 Lines 33-57 describes the SD and SDL modes that are set based on the recording mode and identified by the front and rear frames as described in Column 6 Lines 38-50); however, fails to disclose

- o said control means controls said recording means to record the detection data by multiplexing the detection data on the still image data from a head portion of the second recording period.

Hori teaches a recording apparatus further comprising:

- o said control means controls said recording means to record the detection data by multiplexing the detection data on the still image data from a head portion of the second recording period (Column 5 lines 47+ through Column 6 Lines 1-22 describes the detecting of still images recorded on the recording medium based on predetermined timing. Additionally, as described the data is processed based on detection of data as it enters the system. The compression modes are then set according to the inputted data from the head portion of the image data of that recording period. As seen in Figure 2 the head portion 5 allows the system information for further processing).

It is taught by Hori to provide a control means for recording information that is detected to provide an effective detection between still and moving video in various modes as described in Column 6 Lines 30-59. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use the recording mode system of still and moving images, as disclosed by Imai, and further teach the system to incorporate control means for controlling the recording of detection data, as taught by Hori, in order to allow for proper and efficient detection of video images.

[claim 5]

Regarding Claim 5, Imai discloses an apparatus wherein recording means records the image data of one frame in an n number of tracks (n is an integer of 1 or more) on the recording medium on the first recording mode, and the image data of one frame in an $2xn$ number of tracks on the recording medium on the second recording mode (Figure 2 shows two recording modes wherein the recording of image data having $n=5$ tracks providing an SDL recording mode. The second recording mode of 10 tracks ($2xn$; $n=5$) providing a second recording mode of SD format. The various recording modes are described as further described in Column 2 Lines 5-56).

[claim 7]

Regarding Claim 7, Imai discloses an apparatus wherein the second recording mode is set according to SD specifications defined by HD Digital VCR Council, and the first recording mode is set according to SD High Compression Specifications defined by HD Digital VCR Council (Column 1 Lines 33-59 describe the SD and SDL modes and specifications in a digital VCR environment); however, fail to disclose it is set according to the SD High Compression Specifications defined by HD Digital VCR Council. Although, the references does not disclose the specifications according to the HD Digital VCR Council it would be obvious to incorporate the specifications (official notice). The incorporation of the SD specifications according to the HD Digital VCR Council would allow the data to comply with digital standards allowing the data to be playable on many digital mediums.

[claim 8]

Regarding Claim 8, Imai discloses an apparatus wherein detection is identification codes (Column 7 Lines 50-64 describes identification codes used for detection between various tracks and data. Furthermore, as the system records still and moving pictures it is well known in the art that PPID, FC, ST, SC signals are all automatically recorded during the recording of still and moving pictures); however, fails to disclose the detection data is a photo picture ID (PPID) defined by HD Digital VCR Council. Although, the references does not disclose PPID as defined by HD Digital VCR Council it would be obvious to incorporate the PPID as defined by the council (official notice). The incorporation of the specifications according to the HD Digital VCR Council would allow the data to comply with digital standards allowing the data to be playable on many digital mediums.

[claim 9]

Regarding Claim 9 as discussed in Claim 1, and Imai further discloses the following:

- a first recording mode for recording moving and still image data each having a first information quantity per unit time on a recording medium (Column 1 Lines 33-60 describes the recording of digital video data wherein the moving image data is recorded onto the recording medium in various modes as stated in Column 10 Lines 13-51. Furthermore, it is noted that still reproduction can be achieved at this time by having a frame repeated continuously for purposes of recording a still frame. The digital data being recorded is processed through the SDL recording mode as described in Column 2 Lines 19-67);

- A second recording mode for recording moving and still image data each having a second information quantity larger than the first information quantity per unit time on the recording medium (The digital data is recorded using a second mode of SD as described in Column 6 Lines 1-22. The SD recording mode allows for larger quantity per unit time as the digital data of a frame is recorded on ten tracks compared to SDL two frames are recorded on ten tracks as described in Column 1 Lines 33-58. Thereby the SD mode provides a larger quantity per unit time on the recording medium);
- A mode switch for setting the first and second recording modes (Column 11 Lines 50-67 describes the mode switching between the two recording modes of SD and SDL. The recording modes are evaluated based on the data being processed then the appropriate recording mode is set); however, fails to disclose
 - Wherein said control means changes the predetermined recording period for recording the still image data from the start of recording still image data to the stopping of recording the still image data is between a first predetermined period for recording the still image data and a second predetermined period shorter than the first predetermined period for recording the still image data in accordance with the recording mode when the first recording mode is set by said mode switch, said recording apparatus still image data with detection data for detecting the still image data recorded on the recording medium in response to an instruction of still image recording and stops at the first predetermined period after the

recording was started and when the second recording mode is set said recording apparatus starts recording still image data when the detection data on the recording medium in response to the instruction of still image recording and stops recording at the second predetermined period after the recording was started.

Fisher et al teaches a system wherein still images are processed and utilized from moving images further comprising:

- o Wherein said control means changes the predetermined recording period for recording the still image data between a first predetermined when the first recording mode setting means, and changes the predetermined recording period to a second predetermined period shorter than the first predetermined period when the second recording mode is set (Column 6 Lines 64+ through Column 7 Lines 1-11 describes the recording of still frames based upon the extraction of still frame from video data at a correct time interval. Furthermore, it is stated and shown in Figure 7 a second predetermined time interval for recording still frames wherein the still frames provide an overlapping region between each frame as the predetermined time period is shorter and thus provides overlapping of still frames as described in Column 7 Lines 12-67 through Column 8 Lines 47).

It is thereby taught by Fisher et al to provide various time intervals for recording still pictures. The various time intervals containing a second shorter time interval for producing adjacent still frames to allow for greater overlap regions thus generate improved photographic detail (Column 8 Lines 39-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use recording mode system of still and moving pictures with control recordings of still pictures at predetermined time periods, as disclosed by Imai, and further teach the system to provide various predetermined time periods for the still images to provide proper recording of the still images, as taught by Fisher et al, in order to provide for improved video images.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMIE JO VENT ATALA whose telephone number is (571)272-7384. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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